

## CLAIMS

What is claimed is:

*Sub A*  
1. A power supply circuit for a digital processing system, the circuit comprising:  
2       a first stage associated with a first component of the digital processing system;  
3       and  
4       a second stage associated with a second component of the digital processing  
5       system, said second stage coupled to said first stage;  
6       wherein said first stage drives said second stage.

1       2. The circuit of claim 1, wherein said first and second stages are separated from  
2       each other.

1       3. The circuit of claim 2, wherein said first and second stages are coupled to each  
2       other by a two wire bus.

1       4. The circuit of claim 3, wherein said two wire bus is differentially driven by said  
2       first stage.

1       5. The circuit of claim 2, wherein said first component comprises a display device  
2       and said second component comprises a microprocessor.

1       6. The circuit of claim 5, wherein said first stage is located proximately to said  
2       display device and said second stage is located proximately to said microprocessor.

1       7. The circuit of claim 1, wherein said first stage provides power for said first  
2       component and said second stage provides power for said second component.

1    8.    The circuit of claim 7, wherein said first stage comprises a flyback converter and  
2    said second stage comprises a portion of a forward converter.

1    9.    A power supply circuit for a computer system, the circuit comprising:  
*Sub P*  
2         a first circuit capable of providing power to a first component of the computer  
3    system; and  
4         a second circuit capable of providing power to a second component of the  
5    computer system;  
6         wherein said first and second circuits are electrically coupled to each other.

1    10.   The circuit of claim 9, wherein said first and second circuits are electrically  
2    coupled to each other such that said first circuit can drive said second circuit.

1    11.   The circuit of claim 10, wherein said second circuit and said second component  
2    are disposed on a printed circuit board.

1    12.   The circuit of claim 9, wherein said first circuit is located within an enclosure of  
2    the computer system and proximately to said first component, and wherein said second  
3    circuit is located within said enclosure and proximate to said second component.

1    13.   The circuit of claim 12, wherein said first component comprises a display device  
2    and said second component comprises a microprocessor.

1    14.   The circuit of claim 9 wherein said first circuit comprises a flyback converter and  
2    said second circuit comprises a final stage of a forward converter.

1    15.   A computer system comprising:

2        a power supply circuit coupled to at least a display device and a microprocessor  
3        of the computer system, wherein said power supply circuit is capable of supplying  
4        power to said display device and said microprocessor using at least two distinct power  
5        supply stages.

*Sub A*  
1        16. The computer system of claim 15, wherein said power supply circuit comprises:  
2            a main circuit coupled to one of said display device and said microprocessor;  
3            and  
4            a secondary circuit coupled to the other of said display device and said  
5            microprocessor;  
6            wherein said main circuit drives said secondary circuit.

1        17. The computer system of claim 16 wherein one of said at least two distinct power  
2        supply stages includes said main circuit, and wherein another of said at least two  
3        distinct power supply stages includes said secondary circuit.

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1        18. The computer system of claim 16, wherein said main circuit and said secondary  
2        circuit are physically isolated from each other.

1        19. The computer system of claim 18, wherein said main circuit and said secondary  
2        circuit are electrically coupled to each other.

1        20. The computer system of claim 16, wherein said main circuit comprises a flyback  
2        converter and said secondary circuit comprises a portion of a forward converter.

*Add P7*